

Title (en)  
Leather-like sheet and production method thereof

Title (de)  
Lederartiges Bahnenmaterial und Verfahren zu dessen Herstellung

Title (fr)  
Feuille similaire au cuir et son procédé de fabrication

Publication  
**EP 1482086 A1 20041201 (EN)**

Application  
**EP 04012721 A 20040528**

Priority  
JP 2003152550 A 20030529

Abstract (en)  
A leather-like sheet comprises an entangled nonwoven fabric, which is made of a mixture comprising fibers of an elastic polymer and microfine fibers of an inelastic polymer having an average single fiber fineness of  $\approx 0.1$  dtex, the fibers of the elastic polymer being partially porous and partially fused to each other. An independent claim is also included for a method of producing a leather-like sheet, sequentially comprising producing an entangled nonwoven fabric comprising fibers A capable of forming fibers of an elastic polymer, and fibers B capable of forming microfine fibers of an inelastic polymer having an average single fiber fineness of  $\approx 0.1$  dtex, a component for forming the fibers of an elastic polymer being partially exposed at least to a part of surface of the fibers A; impregnating a liquid containing a good solvent for the elastic polymer into the nonwoven fabric, partially dissolving the elastic polymer; impregnating a liquid containing a poor solvent for the elastic polymer into the nonwoven fabric, making the partially dissolved elastic polymer into partially porous; and converting the fibers A and B respectively into the fibers of the elastic polymer.

IPC 1-7  
**D06N 3/00**; **D04H 1/42**; **D04H 1/46**; **D04H 1/58**; **D06N 3/14**

IPC 8 full level  
**D04H 1/42** (2006.01); **D04H 1/48** (2006.01); **D04H 1/54** (2006.01); **D06N 3/00** (2006.01); **D06N 7/02** (2006.01)

CPC (source: EP KR US)  
**D04H 1/4382** (2013.01 - EP US); **D04H 1/4383** (2020.05 - EP US); **D04H 1/43835** (2020.05 - EP US); **D04H 1/43838** (2020.05 - EP US);  
**D04H 1/48** (2013.01 - EP US); **D04H 1/54** (2013.01 - EP US); **D06N 3/0004** (2013.01 - EP US); **D06N 7/00** (2013.01 - KR);  
**Y10T 442/20** (2015.04 - EP US)

Citation (search report)  
• [DX] US 4515854 A 19850507 - KOGAME KUNIO [JP], et al  
• [A] US 3869310 A 19750304 - FUKUSHIMA OSAMU, et al  
• [A] US 3647591 A 19720307 - MORRIS THOMAS S  
• [A] PATENT ABSTRACTS OF JAPAN vol. 0110, no. 30 (C - 400) 29 January 1987 (1987-01-29)

Cited by  
US10723849B2; US11286356B2

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 1482086 A1 20041201**; **EP 1482086 B1 20060503**; CN 100455708 C 20090128; CN 1609314 A 20050427; DE 602004000787 D1 20060608;  
DE 602004000787 T2 20070426; KR 101027878 B1 20110407; KR 20040103336 A 20041208; TW 200427894 A 20041216;  
TW I342351 B 20110521; US 2004242099 A1 20041202

DOCDB simple family (application)  
**EP 04012721 A 20040528**; CN 200410063973 A 20040528; DE 602004000787 T 20040528; KR 20040037716 A 20040527;  
TW 93115034 A 20040527; US 85417604 A 20040527